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Voltammetric determination of papaverine and drotaverine

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Abstract

Isoquinoline derivatives (papaverine and drotaverine) are oxidized at a graphite electrode in a 0.1 M sulfuric acid solution to give voltammetric waves at 1.1 V for papaverine and at 1.05 and 1.28 V for drotaverine. Determination limits and linearity ranges of currents as functions of papaverine and drotaverine concentrations are estimated. Microgram amounts of papaverine and drotaverine are determined in model solutions (RSD = 1-4%). A procedure for the direct determination of papaverine and drotaverine in pharmaceuticals is proposed. © 2007 Pleiades Publishing, Ltd.

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